Figure 5

SV40 ori/enh Adeno MLP Adeno mRNA leader IgG intron Amp-R PstI (1059) Epo signal peptide Pstl (1247) pED.dC.natEpoFc hEPO PstI (1422) 6624 bp Sbf1 (1631) colE1 origin PstI (1631) EcoRI (1646) `Fcγ1 Adeno Stability Element SV40 PolyA EMC virus 5' UTR (IRES) mouse DHFR

В

EPO M G V H E 1054 ctgcaggcggagatgggggtgcacgaa EPO 6 C P A W L W L L L S L L S L P L G L P V 1081 tgtcctgcctggctgtggcttctcctgtccctgctgtcgctccctctgggcctcccagtc EPO 26 L G A P P R L I C D S R V L E R Y L L E 1141 ctgggcgccccaccacgcctcatctgtgacagccgagtcctggagaggtacctcttggag EPO 46 A K E A E N I T T G C A E H C S L N E N $1201\ \texttt{gcca} \texttt{aggaggccgagaatatca} \texttt{cagacgggctgtgctgaaca} \texttt{ctgcag} \texttt{cttgaatgagaat}$ EPO 66 I T V P D T K V N F Y A W K R M E V G Q 1261 atcactgtcccagacaccaaagttaatttctatgcctggaagaggatggaggtcgggcag 86 Q A V E V W Q G L A L L S E A V L R G Q

86 Q A V E V W Q G L A L L S E A V L R G Q 1321 caggccgtagaagtctggcagggcctggcctgctgtcggaagctgtcctgcggggccag



EPO

LHAL										EP										
106 1381	Α	L	L	V	N	s	s	Q	P	W tgg	E gag	Р	L	Q cag	L	Н	v	D	ĸ	А
	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~
126 1441	V	S	G	L	R	s	L	T	Т	L	L	R	Α	L	G	Α	0	к	E	А
	~~~	~~~	~~~	~~~	~~~	~~~	~~~	.~~~	~~~	EP0		~~~	~~~	~~~	~~~	~~~	~ ~ ~	~~~	~ ~ ~	
146	I	s	P	P	D	Α	Α	s	Α	Α	P	L	R	т	I	т	Α	D	Т	F
1501	atc	tcc	cct	cca	gat	gcg	gcc	tca	gct	gct	cca	ctc	cga	aca	atc	act	gct	gac	act	ttc
	EPO																			
166	R																			
1561																				
	EPO											-		_	,	,		Fc	γ1	
186										ਜ	Δ	G	Δ	7\	7\	17				~~~
1621	gag	gcc	tgc.	agg.	aca	ggg	gac	aga	gaa	ttc	icc.	adc	qcc	gct	aca	atc	qac	aaa	act	cac
		Sb.	£I/	Pst				_	Ec	ORI			,	J	<i>5</i> - 5	,	,			
	~~~	~~~	~~~	~~~	~ ~ ~	~ ~ ~				Fcy	1									~~~
206																				
1681	aca	tgc	cca	ccg.	tgc	cca	gca	cct	gaa	ctco	tg	ggg	gga	ccg	tca	gtc	ttc	ctc	ttc	ccc
	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~		Fcy ~~~		~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~
226	P	K	P	K	D	Т	L	M	I	s	R	T	P	E	v	т	С	V	V	v
1741	cca	aaa	ccc	aag	gac	acc	ctc	atg	atc	tccc	gga	асс	cct	gag	gtc	aca	tgc	gtg	gtg	gtg
	Fcγ1																			
246	D																			
1801																				
										Fcy										
266										~~~ E										
1861											_									
				_		_	_			, ,	_			,	,			<i>J</i> - <i>J</i>	,	- 3 -
	~~~	~~~	-~~	~~~	~~~	~~~	~~~	~~~	~~~	Fcy	'1 -~~	~~~	~~~	~~~	~~~	~~~	~~~	~~~	~ ~ ~	~~~
286	v	L	Т	V	L	Н	Q	D	W	L	N	G	K	E	Y	K	С	K	V	s
1921	gtc	ctca	acc	gtc	ctg	cac	cag	gac	tgg	ctga	ato	ggc	aag	gag	tac	aag	tgc	aag	gtc	tcc
										Fcy	1									
306	N	-~ К	~~~· A	L L	~~~ P	~~~ A	~~~ P	~~~ I	~~~· E	~~~ K	-~- Т	-~~ I	~~~ S	~~~ K	~~~ A	~~~ K	~~~ G	~~~ O	~~~ P	~~~ R
1981																				
	Fcγl																			
326	~~~·										-~~· R	~~~ D	~~~ F	~~~ T.	~~~ ጥ	~~~ K	~~~ NI	~~~	~~~	~~~ S
2041																		_		
			=	=			,											,	-	-



Attorney Docket No.: \$1383.70011US00

346 L T C L V K G F Y P S D I A V E W E S N  ${\tt 2101\ ctgacctgcctggtcaaaggcttctatcccagcgacatcgccgtggagtgggagagcaat}$ 

Fcy1

366 G Q P E N N Y K T T P P V L D S D G S  $\mathbf{F}$ 2161 gggcagccggagaacaactacaagaccacgcctcccgtgttggactccgacggctccttc

Fc_γ1

386 F L Y S K L T V D K S R W Q Q G N V F S  ${\tt 2221\ ttcctctacagcaagctcaccgtggacaagagcaggtggcagcaggggaacgtcttctca}$ 

Fc_γ1

406 C S V M H E A L H N H Y T Q K S L S L S  ${\tt 2281\ tgctccgtgatgcatgaggctctgcacaaccactacacgcagaagagcctctccctgtct}$ 

Fcy1

426 P G K 2341 ccgggtaaatga

(SEQ ID NO:10)

(SEQ ID NO:9)



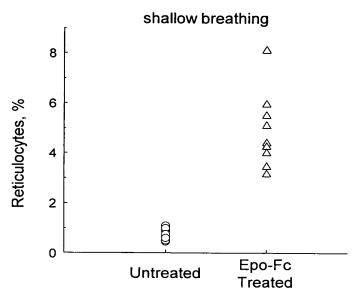


FIG. 6A

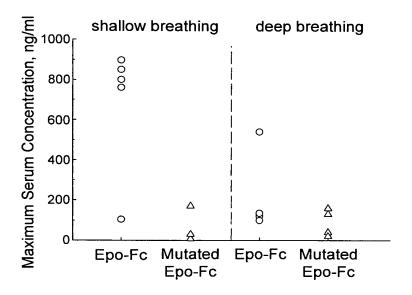


FIG. 6B

Filing Date: July 17, 2003 Attorney Docket No.: S1383.70011US00

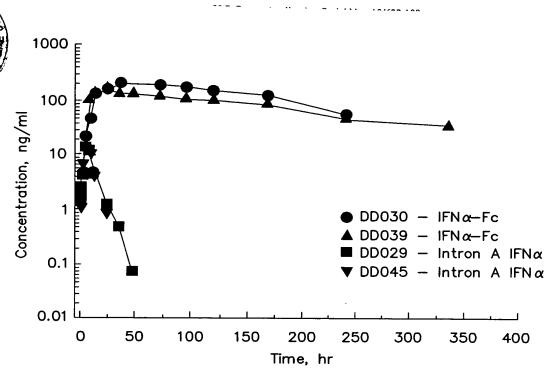


FIG. 9

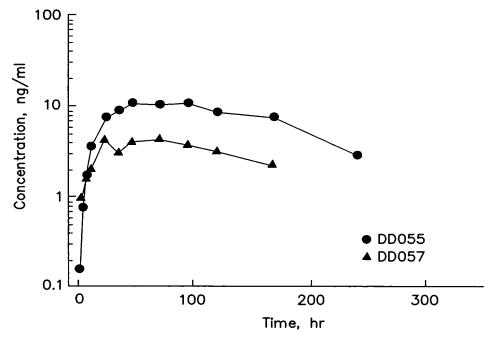


FIG. 10



U.S. Patent Application Serial No.: 10/622,108
Applicants: Richard S. BLUMBERG et al.
Title: CENTRAL AIRWAY ADMINISTRATION
FOR SYSTEMIC DELIVERY OF
THERAPEUTICS

Filing Date: July 17, 2003 Attorney Docket No.: \$1383.70011US00

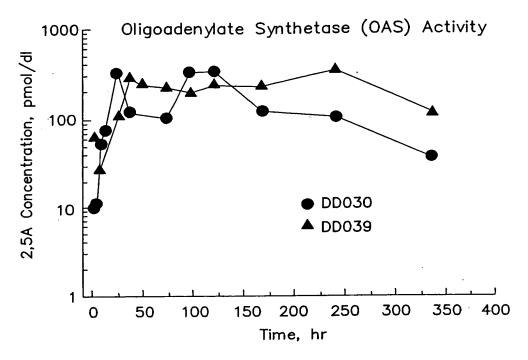


FIG. 11A

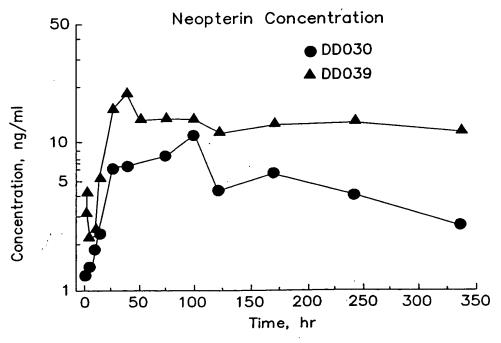


FIG. 11B



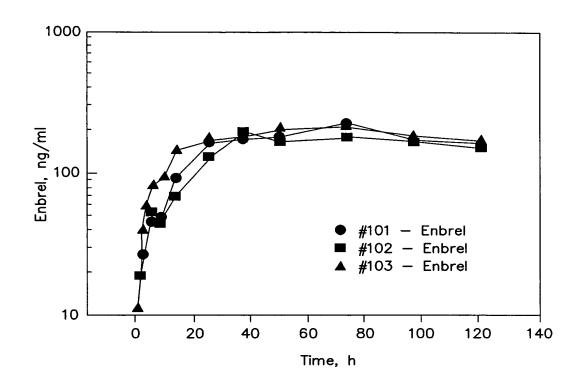
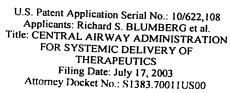


FIG. 12



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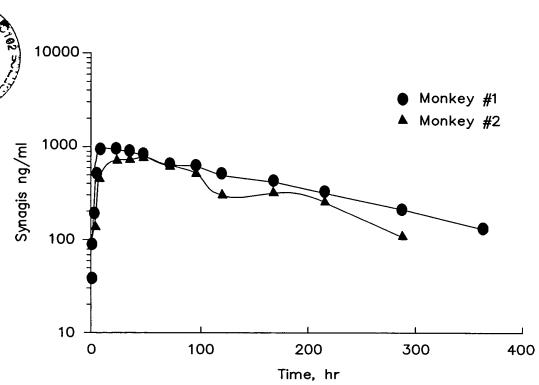


FIG. 13A

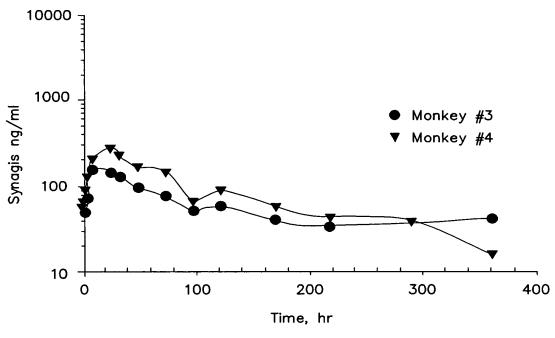


FIG. 13B